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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,184	02/06/2002	Edward A. Green	FURO/05/111	8062
37563	7590	03/24/2005	EXAMINER	
WOOD, HERRON & EVANS, LLP (SAINT-GOBAIN) 2700 CAREW TOWER 441 VINE STREET CINCINNATI, OH 45202			HOOK, JAMES F	
			ART UNIT	PAPER NUMBER
			3754	

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SN

<b>Office Action Summary</b>	<b>Application No.</b> 10/068,184	<b>Applicant(s)</b> GREEN ET AL.	
	<b>Examiner</b> James F. Hook	<b>Art Unit</b> 3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tonyali in view of Phillippi and Stoeppelmann. The patent to Tonyali discloses the recited laminated brake hose comprising an innermost nylon layer 14, an outermost nylon layer 15, a reinforced layer 16 that is provided as a layer sandwiched by two layers of HDPE, where the reinforcement layer is made of polyester fibers including the a range overlapping the required pics per inch of claim 5, where the polyamides used are chosen from polyamides 11 and 12, and the thickness of the inner layer also overlaps the recitation of claim 6 in light of applicants discussion that mills refers to 1/1000<sup>th</sup> of an inch. The patent to Tonyali discloses all of the recited structure with the exception of forming the brake tubing of a coiled shape, and forming the connection layers that sandwich the reinforcement of polyurethane in place of HDPE which has a specific hardness. The patent to Phillippi discloses the recited laminated brake hose where such can be provided with inner and outer layers of nylon 13,14, and providing a reinforcement layer 15 where the tube can be formed with a coiled shape to allow it to self retract. It would have been obvious to one skilled in the art to modify the hose in

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Tonyali to be formed of a coiled configuration as such would allow the hose to be self retracting and would thereby reduce the risk of damage to the hose as suggested by Phillippi. The patent to Stoeppelmann discloses a hose for gaseous or liquid media including brake lines (col. 1, line 14 and col. 1, line 7) comprising an inner layer of polyamide or nylon, where polyamide 6, 11, or 12 can be used, in one embodiment polyurethane is used in an intermediate layer (col. 3, line 40), where the polyurethane used in the invention can be polyether or polyester polyurethane (col. 2, lines 47-49), where such are more compatible with polyester and polyamide materials (col. 2, lines 43-52), and an outer layer can also be formed of polyamide as per the embodiment mentioned above. It is considered inherent that the same type of polyurethane used, in absence of any disclosed additives to the polyurethane to alter it's hardness, in applicants hose would have equal hardness to that disclosed in Stoeppelmann. It would have been obvious to one skilled in the art to modify the connecting layer provided with reinforcement in Tonyali by using polyether polyurethane as the intermediate layer with an inherent hardness as such would provide better adhering properties to the polyurethane layer when it is touching polyesters and polyamides as suggested by Stoeppelmann and where such is a known equivalent material used for connecting layers of polyamides in place of polyolefins of which HDPE is a polyolefin as set forth in Tonyali.

### ***Response to Arguments***

Applicant's arguments filed February 28, 2005 have been fully considered but they are not persuasive. With respect to the arguments directed at the patent to

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Stoeppelman and its combination with Tonyali, Stoeppelman uses polyurethane as an adhering layer or connecting layer the same as Tonyali uses its connecting layer, where Stoeppelman is teaching that polyurethane is used for connecting layers of different materials which are the same types of materials that Tonyali is connecting with a different type of connection layer, therefore the reference to Stoeppelman itself teaches the equivalence of using a polyurethane for the same type of connection layer in Tonyali for connecting the same types of dissimilar materials, and thereby provides the motivation to combine the references. See Stoeppelman column 2, lines 43-64. Therefore, the argument that polyurethane is not an equivalent material to polyethylene is not persuasive when the examiner relies on the teachings of Stoeppelman to use a different type of connecting layer that connects the same materials as Tonyali's polyethylene layer connects, thereby teaching that polyurethane is a suitable connection layer used in combination with the recited materials in Tonyali which are connected by polyethylene. Without any argument directed toward why polyurethane would not be a suitable connection layer for connecting these materials taught both in Tonyali and Stoeppelman, then it is not considered persuasive to say that the layer substitution is improper. The remaining arguments are directed toward features of applicants tube which are not currently being claimed and therefore are not considered pertinent arguments.

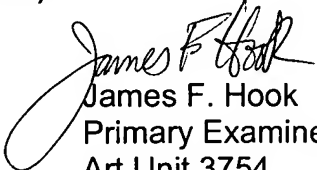
### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Powell (555 and 988), and Derderian disclosing state of the art multilayer tubes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (571) 272-4903. The examiner can normally be reached on Monday to Wednesday, work at home Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on (571) 272-4906. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
James F. Hook  
Primary Examiner  
Art Unit 3754

JFH